

REMARKS

Claim Rejections - 35 U.S.C § 112

The Examiner rejected claims 2-5 and 11-12 under 35 U. S. C § 112. The Examiner objected to the term “somewhat right circular cylindrical” to claim the shroud. The Examiner rejected claim 6 under 35 U. S. C § 112. The Examiner indicates objected to the term “about.”

The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F.2d 1200, 1217, 18 USPQ2d 1016, 1030 (Fed. Cir.), *cert. denied sub nom., Genetics Inst., Inc. v. Amgen, Inc.*, 112 S. Ct. 169 (1991) (citing *Shatterproof Glass Corp. v. Libby-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed. Cir. 1985)). *In re Warmerdam*, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). “[A] patent applicant is entitled to a reasonable degree of latitude in complying with the second paragraph of 35 U. S. C. § 112 and the examiner may not dictate the literal terms of the claims * * *. Stated another way, a patent applicant must comply with 35 U. S. C. § 112, second paragraph, but just how the applicant does so, within reason, is within applicant’s discretion.” *Ex parte Tanksley*, 37 USPQ2d 1382, 1386 (Bd Pat App & Int 1994).

With regard to the term “right” that is used in claim 2 to describe a “cylindrical shroud” and in claim 3 to describe a “circular cylindrical shroud,” according to <http://dictionary.reference.com>, a “cylinder” is “[t]he surface generated by a straight line intersecting and moving along a closed plane curve, the directrix, while remaining parallel to a fixed straight line that is not on or parallel to the plane of the directrix.” “Right” means, *inter alia*, “[f]ormed by or in reference to a line or plane that is perpendicular to another line or plane” and “circular” means, *inter alia*, “[o]f or relating to a circle” and “[s]haped like or nearly like a circle; round.” *Id.* Thus a substantially right circular cylinder is a cylinder whose directrix is substantially a circle and whose fixed straight line is substantially perpendicular to the plane of its directrix.

With regard to the use of terms “about” and “approximate,” the court in *Ecolab, Inc. v. Envirochem, Inc.* 264 F.3d 1358 (Fed. Cir. 2001) noted that:

like the term “about,” the term “substantially” is a descriptive term commonly used in patent claims to “avoid a strict numerical boundary to the specified parameter.” *Pall Corp. v. Micron Seps.*, 66 F.3d 1211, 1217, 36 USPQ2d 1225, 1229 (Fed.Cir.1995); *See, e.g., Andrew Corp. v. Gabriel Elecs. Inc.*, 847 F.2d 819, 821-22, 6

USPQ2d 2010, 2013 (Fed.Cir.1988) (noting that terms such as “approach each other,” “close to,” “substantially equal,” and “closely approximate” are ubiquitously used in patent claims and that such usages, when serving reasonably to describe the claimed subject matter to those of skill in the field of the invention, and to distinguish the claimed subject matter from the prior art, have been accepted in patent examination and upheld by the courts).

Id. at 1367.

In *Modine Mfg. Co. v. U.S. Int'l Trade Comm'n*, 75 F.3d 1545 (Fed. Cir. 1996), the court discussed the meaning and the use of the word “about”:

[t]he specification uses the qualifier “about,” and also states that the optimum hydraulic diameter varies with the conditions. Such broadening usages as “about” must be given reasonable scope; they must be viewed by the decisionmaker as they would be understood by persons experienced in the field of the invention. ... Although it is rarely feasible to attach a precise limit to “about,” the usage can usually be understood in light of the technology embodied in the invention. When the claims are applied to an accused device, it is a question of technologic fact whether the accused device meets a reasonable meaning of “about” in the particular circumstances.

Id.

The claims 2-5, 11 and 12 have been amended accordingly. The Examiner indicated that claim 6 was otherwise allowable if it were amended so as to incorporate the limitations from each claim from which it depends and so as not to depend from any rejected claim. Claim 6 has been so amended. In view of the above definitions, no further amendment to claim 6 was believed necessary. Applicants respectfully submit the Examiner’s rejection under 35 U. S. C § 112 is therefore overcome and request that the Examiner’s rejection be withdrawn.

Claim Rejections - 35 U.S.C § 102

The Examiner rejected claim 1 under 35 U. S. C. § 102. Claim 1 is cancelled without prejudice. This rejection is thus moot.

The Examiner rejected claims 1-10, 13 and 15-20 under 35 U. S. C. § 102. The Examiner relied upon Seitz U. S. Patent 4,520,949 (hereinafter Seitz) to support this rejection. Again, as to the rejection of claim 1, claim 1 is cancelled without prejudice. The rejection of claim 1 is thus moot.

As to claims 2-10, 13 and 15-20, Seitz does not disclose or suggest claim 5’s specifically recited:

“shroud including two portions which abut each other at first and second joints which extend generally longitudinally of the shroud, the first one of the portions subtend[ing] an arc measured about the axis of substantially more than 180°, and the second one of the portions subtend[ing] an arc about the axis of substantially less than 180°.”

Applicants submit that since independent claim 5 distinguishes patentably from the prior art of record, dependent claims 2-4, 6-10, 13 and 15-20, all of which depend directly or indirectly on claim 5, patentably distinguish from the prior art of record as well. Favorable consideration, culminating in allowance of claims 2-10, 13, 15-20, is respectfully requested.

35 U. S. C. § 103 Rejection

The Examiner rejected claim 14 under 35 U. S. C. § 103. The Examiner relied upon the combination of Seitz, Weinstein U. S. Patent D283,832 (hereinafter Weinstein) and Alexander U. S. Patent 5,632,448 (hereinafter Alexander) to support this rejection.

The Examiner rejected claim 11-12 under 35 U. S. C. § 103. The Examiner relied upon the combination of Seitz and Glover U. S. Patent 4,611,887 (hereinafter Glover) to support this rejection.

Seitz neither discloses or suggests claim 5's specifically recited:

“shroud including two portions which abut each other at first and second joints which extend generally longitudinally of the shroud, the first one of the portions subtend[ing] an arc measured about the axis of substantially more than 180°, and the second one of the portions subtend[ing] an arc about the axis of substantially less than 180°.”

Neither Seitz nor Glover discloses or suggests claim 11's specifically recited:

“shroud including two portions which abut each other at first and second joints which extend generally longitudinally of the shroud, one of the portions includes a lateral edge including a first feature, and the other of the portions includes a lateral edge including a second feature which is complementary to the first feature, the first feature comprises a substantially V-bottomed groove, and the second feature comprises a substantially V-shaped edge.”

Applicants submit that since independent claim 5 and 11 distinguish patentably from the prior art of record, dependent claim 12 and 14, which depend from claims 5 and 11 respectively, patentably distinguish from the prior art of record as well. That which is neither disclosed nor suggested by any of the references cannot fairly be said to be disclosed by any combination of them.

When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) (“the central question is whether there is reason to combine [the] references,” a question of fact drawing on the Graham factors).

“The factual inquiry whether to combine references must be thorough and searching.” Id. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000) (“a showing of a suggestion, teaching, or motivation to combine the prior art references is an ‘essential component of an obviousness holding’”) (quoting C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998)); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”); In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (“teachings of references can be combined only if there is some suggestion or incentive to do so.”) (emphasis in original) (quoting ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

The need for specificity pervades this authority. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) (“even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.”); In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the

relevant teachings of the references”).

With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that “the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software” and that “another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial” do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to “[use] that which the inventor taught against its teacher.” W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

Deferential judicial review under the Administrative Procedure Act does not relieve the agency of its obligation to develop an evidentiary basis for its findings. To the contrary, the Administrative Procedure Act reinforces this obligation. See, e.g., Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 43 (1983) (“the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'”) (quoting Burlington Truck Lines v. United States, 371 U.S. 156, 168 (1962)); Securities & Exchange Comm'n v. Chenery Corp., 318 U.S. 80, 94 (1943) (“The orderly function of the process of review requires that the grounds upon which the administrative agency acted are clearly disclosed and adequately sustained.”).

In its decision on Lee's patent application, the Board rejected the need for “any specific hint or suggestion in a particular reference” to support the combination of the Nortrup and Thunderchopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action. See Motor Vehicle Manufacturers, 463 U.S. at 43 (“an agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem”); Mullins v. Department of Energy, 50 F.3d 990, 992 (Fed. Cir. 1995) (“It is well established that agencies have a duty to provide reviewing courts with a sufficient explanation for their decisions so that those decisions may be judged against the relevant statutory standards, and that failure to provide such an explanation is grounds for striking down the action.”). As discussed in National Labor Relations Bd. v. Ashkenazy Property Mgt. Corp., 817 F.2d 74, 75

(9th Cir. 1987), an agency is “not free to refuse to follow circuit precedent.”

The foundation of the principle of judicial deference to the rulings of agency tribunals is that the tribunal has specialized knowledge and expertise, such that when reasoned findings are made, a reviewing court may confidently defer to the agency's application of its knowledge in its area of expertise. Reasoned findings are critical to the performance of agency functions and judicial reliance on agency competence. See Baltimore and Ohio R. R. Co. v. Aberdeen & Rockfish R. R. Co., 393 U.S. 87, 91-92 (1968) (absent reasoned findings based on substantial evidence effective review would become lost “in the haze of so-called expertise”). The “common knowledge and common sense” on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. This court explained in Zurko, 258 F.3d at 1385, 59 USPQ2d at 1697, that “deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.’” The Board's findings must extend to all material facts and must be documented on the record, lest the “haze of so-called expertise” acquire insulation from accountability. “Common knowledge and common sense,” even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority. See Allentown Mack, 522 U.S. at 376 (“Because reasoned decisionmaking demands it, and because the systemic consequences of any other approach are unacceptable, the Board must be required to apply in fact the clearly understood legal standards that it enunciates in principle”)

The case on which the Board relies for its departure from precedent, In re Bozek, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969), indeed mentions “common knowledge and common sense,” the CCPA stating that the phrase was used by the Solicitor to support the Board's conclusion of obviousness based on evidence in the prior art. Bozek did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. Bozek did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. Nor does Bozek, after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421 (Fed. Cir. 1999), that Bozek's reference to common knowledge “does not in and of itself make it so” absent evidence of such knowledge.

In re Lee, 61 U. S. P. Q. 2d 1430, 1433-1435, (Fed. Cir. Jan. 18, 2002).

Under Lee, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. Section 2143 - Section 2143.03 for decisions pertinent to each of these criteria. M.P.E.P. § 2142.

[V]irtually all [inventions] are combinations of old elements.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 U.S.P.Q. 865, 870 (Fed. Cir. 1983); *see also Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 U.S.P.Q. 8, 12 (Fed.Cir.1983) (“Most, if not all, inventions are combinations and mostly of old elements.”). An examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be “an illogical and inappropriate process by which to determine patentability.

In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), citing Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570, 38 USPQ.2d 1551, 1554 (Fed. Cir. 1996).

Neither Seitz, nor Weinstein, nor Alexander discloses or suggests the desirability of combining elements from the references in the manner specifically recited in the claims. Neither Seitz nor Glover discloses or suggests the desirability of combining elements from the references in the manner specifically recited in the claims. The Examiner has not elucidated any reason why a skilled artisan without knowledge of the present invention would have selected elements from the references and combined them as the Examiner has proposed to meet the limitations of the claims. It appears that the only source for the motivation to combine the references as the Examiner proposes is the present application. It is not unreasonable to infer that the Examiner selected these references with the assistance of hindsight based on Applicants' claims. Courts forbid the use of hindsight in

the selection of references that comprise the case of obviousness. In re Rouffet, 149 F.3d at 1358. See In re Gorman, 933 F.2d 982, 986, 18 U.S.P.Q.2d 1885, 1888 (Fed. Cir. 1991). Lacking the necessary motivation to combine the references, the Examiner has not established a *prima facie* case of obviousness.

Accordingly, Applicants submit that the 35 U. S. C. §§ 102, 103 and 112 rejections of claims 2-20 are overcome. Favorable consideration, culminating in allowance of claims 2-20 is respectfully requested.

The Commissioner is hereby authorized to charge any fees which may be due to constitute this a timely response to the September 28, 2005 official action to Applicants' undersigned counsel's deposit account 10-0435 with reference to file number 3030-74238. A duplicate copy of this authorization is enclosed for that purpose.

Respectfully submitted,



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